B. A permit shall be revoked in accordance with the procedures set forth in Adjudicatory Procedures - Environment Department, 20.1.5 NMAC. Construction, modification and operation, if any, shall cease upon the effective date of the revocation.
[20.9.3.19 NMAC - Rp, 20 NMAC 9.1.II.212 NMAC, 08/02/07]

20.9.3.20 EFFECT OF PERMIT.

A. Any terms or conditions of the permit shall be enforceable to the same extent as a regulation of the board.

B. The existence of a permit issued under 20.9.2 - 20.9.10 NMAC shall not constitute a defense to a violation of 20.9.2 - 20.9.10 NMAC or the Solid Waste Act.
[20.9.3.20 NMAC - Rp, 20 NMAC 9.1.II.212 NMAC, 08/02/07]

20.9.3.21 PERMITTED FACILITIES - DUTIES PRIOR TO OPERATION.

A. At least 14 days prior to the start of solid waste facility construction, the owner or operator shall provide the department with a major milestone schedule.

B. After a permit is granted for a solid waste facility or for the expansion of a solid waste facility, and at least 14 days prior to disposal, processing, or transforming of any solid waste at the solid waste facility or expansion, the owner or operator shall:

(1) provide to the department a written notice of construction completion with "as built" construction drawings signed and sealed by a registered professional engineer; and

(2) for landfills, provide the department a quality assurance/quality control report, certified by a registered professional engineer licensed in New Mexico and experienced in liner installation, for construction of the liner and leachate collection system.

C. The owner and operator shall prohibit the disposal, processing, or transformation of solid waste at a new or modified portion of a solid waste facility until the department has either inspected the solid waste facility or modified portion and determined that the site has been developed in accordance with the permit or permit modification, 20.9.2 - 20.9.10 NMAC and the Solid Waste Act, or the department fails to inspect the solid waste facility within 30 calendar days of receipt of written notice of construction completion and any quality assurance/quality control report or engineer's certification that the facility or modification has been constructed in accordance with the permit or permit modification, 20.9.2 - 20.9.10 NMAC and the Solid Waste Act, and that a quality assurance/quality control report is being prepared.

D. The owner and operator shall prohibit the disposal, processing, or transformation of solid waste at a new or modified portion of a solid waste facility until the owner or operator has secured financial assurance and has submitted appropriate documentation to the department prior to the initial receipt of waste at a new or modified portion of a solid waste facility.
[20.9.3.21 NMAC - N, 08/02/07]

20.9.3.22 PERMIT OR FACILITY MODIFICATION.

A. Any owner or operator of a solid waste facility who seeks to modify such facility or permit conditions shall obtain a permit modification prior to making any modifications. A permit modification shall not extend the initial term of any permit.

B. An application for a modification shall demonstrate compliance with the portions of 20.9.2 - 20.9.10 NMAC that pertain to such a modification.

C. The secretary may initiate the modification of permit conditions or require modification of the facility if:

(1) changes occur after permit issuance which justify permit conditions that are different from or are not included in the existing permit;

(2) the secretary has received information that was not in the record at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance;

(3) the standards or regulations on which the permit was based have changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision after the permit was issued;

(4) the secretary determines good cause exists for modification, such as an act of God, strike, flood, or materials shortage, or other events over which the permittee has little or no control and for which there is no reasonable remedy.

D. All permit modifications, whether initiated by the owner or operator or by the secretary, shall be subject to Permit Procedures - Environment Department, 20.1.4 NMAC and permitting procedures in this part.

(a) geosynthetic components of a liner system must be compatible with the waste to be contained; they must be able to resist chemical attack from the waste or leachate; this shall be demonstrated by means of manufacturer's test reports, or laboratory analyses;

(b) any geosynthetic materials installed on slopes greater than 25 percent, or on any slope where waste is projected to be more than 100 feet deep, must be designed to withstand the calculated tensile forces acting upon the geosynthetic materials; the design must consider the maximum friction angle of the geosynthetic with regard to any soil-geosynthetic or geosynthetic-geosynthetic interface and must ensure that overall slope stability is maintained; and

(c) field seams in geosynthetic material shall be oriented parallel to the line of maximum slope (i.e., oriented along, not across the slope); the number of field seams in corners and irregular shaped areas shall be minimized; there shall be no horizontal seam within five feet of the toe of the slope;

(3) requirements for the soil component of all liners:

(a) the bottom geosynthetic layer, shall be placed on a prepared subgrade consisting of, at a minimum, of a 6-inch layer of in-situ soil or select fill compacted to 90 percent standard Proctor density;

(b) the surface of the soil upon which a geosynthetic liner will be installed must be free of stones greater than 1/2-inch in any dimension, organic matter, local irregularities, protrusions, loose soil, and any abrupt changes in grade that could damage the geosynthetic liner; and

(c) the soil component of the composite liner defined in Subparagraph (b) of Paragraph (1) of Subsection A of this section shall be compacted to a minimum of 90 percent standard Proctor density and shall have the following physical characteristics unless otherwise specifically approved by the department:

(i) plasticity index greater than 10 percent;

(ii) liquid limit between 25 percent and 50 percent;

(iii) portion of material passing the No. 200 sieve (0.074 mm and less fraction) greater than 40 percent (by weight); and

(iv) clay content greater than 18 percent (by weight);

(4) all liners shall have a top protective cover of at least two feet of granular soil or other material specifically approved by the department; the protective cover shall, in addition to providing physical protection for the liner, facilitate the collection of leachate in the leachate collection system; materials used to construct the protective cover must ensure the hydraulic leachate head on the liner does not exceeds one foot; the soil material shall be free of any organic matter and have the following physical characteristics unless otherwise specifically approved by the secretary:

(a) portion of material passing the No. 200 sieve (0.074 mm and less fraction) no greater than 5 percent by weight; and

(b) uniformity coefficient (Cu) less than 6 where Cu is defined as D60/D10.

[20.9.4.13 NMAC - Rp, 20 NMAC 9.1.III.306, 08/02/07]

20.9.4.14 TESTING AND QUALITY CONTROL FOR LINERS AND FINAL COVERS.

A. All testing of geosynthetic and soil materials shall be performed in accordance with applicable American society of testing materials (ASTM) standards.

B. The construction and installation of all liners and final covers shall be done in accordance with a quality control plan approved in the permit. All testing and evaluation of liners shall be certified by a professional engineer licensed in New Mexico and experienced in liner installation, and shall be completed prior to the placement of the protective cover. All field testing of liners and final covers shall be the responsibility of an individual experienced in liner or cover installation and soils or geotextile engineering, as appropriate. The quality control plan shall:

(1) define the procedures required for obtaining samples and testing and reporting the test results for the installation of the liner and final cover;

(2) describe and illustrate to operating personnel all necessary procedures for maintaining the integrity of the liner, leachate collection systems, and final cover;

(3) for the soil component, prescribe the following minimum frequency of testing for the soil component of all liners and final covers, unless otherwise specifically approved by the department:

(a) soil from the borrow source shall be tested as follows:

(i) grain size shall be tested once every 1,000 cubic yards;

(ii) Atterberg limits shall be tested once every 5,000 cubic yards;

(iii) Proctor compaction moisture-density curve conformance shall be tested once every 5,000 cubic yards; and

(iv) laboratory permeability shall be tested once every 5,000 cubic yards; and

(b) during construction of the liner or cover, the soil shall be tested as follows:

(i) density and moisture content tested by nuclear desiometer shall be tested four times per acre per lift;

(ii) laboratory or in-situ permeability shall be tested once per 2 acres and laboratory samples shall be undisturbed or recompacted to the site-specific field conditions; and

(iii) total thickness (by survey) shall be tested once per acre (on grid);

(4) for the prot ective cover component of liners, when used to facilitate leachate drainage, prescribe the following minimum frequency of testing of the granular drainage layer, unless specifically approved by the department:

(a) grain size of the soil shall be tested once every 1,500 cubic yards; and

(b) total thickness of the drainage layer shall be tested five times per acre; and

(5) for the geomembrane component of all liners and final covers as defined in Subsection A of 20.9.4.13 NMAC and Subsection A of 20.9.6.9 NMAC, all testing, both shop and field, shall be as recommended by the manufacturer unless otherwise specifically approved by the department; the minimum frequency of taking seam samples for destructive testing shall be one per 500 feet of seam length, with a portion of each test sample tested in the field and another in the laboratory; seam samples shall be tested for peel adhesion and bonded seam strength; non-destructive testing shall be performed for all seams, seam repairs, and liner repairs.

[20.9.4.14 NMAC - Rp, 20 NMAC 9.1.III.307, 08/02/07]

20.9.4.15 LEACHATE COLLECTION SYSTEMS FOR LANDFILLS.

A. Except as specified in 20.9.2.14 NMAC and Subsection C of 20.9.4.13 NMAC, all new municipal and special waste landfills and lateral expansions shall include a leachate collection system, which shall be designed by a professional engineer licensed to practice in New Mexico, and which shall incorporate a piping collection network comprised of perforated pipe having a minimum diameter of 6 inches and a minimum wall thickness of schedule 80 PVC or equivalent and shall be designed and constructed to:

(1) maintain less than a one-foot depth of leachate on the liner;

(2) maintain a minimum of two percent slope throughout the system, within the lined landfill cell; an alternate slope may be specifically approved by the secretary for leachate conveyance piping outside the disposal cell footprint;

(3) withstand chemical attack from waste and leachate; and

(4) withstand the loads, stresses, and disturbances from overlying waste, waste cover materials, and equipment operation.

B. Any geosynthetic materials such as geonets and geotextiles, if used as components of the leachate collection system, must have a hydraulic conductivity, transmissivity and chemical and physical qualities that will not be adversely affected by waste placement, equipment, operation, or leachate generation. These geosynthetics, if used and operating in conjunction with the soil protective cover for the liner as described in Paragraph (4) of Subsection E of 20.9.4.13 NMAC, must have a hydraulic conductivity and transmissivity designed to ensure the hydraulic head on the liner never exceeds one foot.

C. A written leachate management plan shall be submitted for approval by the secretary. The plan shall describe anticipated amounts of leachate, duration of generation and final disposal options for the leachate and shall include:

(1) a description of the means of analysis; and

(2) a description of the type of treatment and proposed disposal method.

D. Leachate storage and collection ponds shall be designed to meet the requirements of 20.9.4.13 NMAC. A pond may be designed to maintain greater than one foot of leachate, provided it is equipped with a double, composite liner as specified in 20.9.4.13 NMAC, or an alternative design providing equivalent protection and approved in the permit.

[20.9.4.15 NMAC - Rp, 20 NMAC 9.1.III.308, 08/02/07]

20.9.4.16 LANDFILL GAS CONTROL SYSTEMS.

A. Owners and operators of landfills who install a landfill gas control system in order to conform with the requirements of Subsection B of 20.9.5.9 NMAC shall submit a description of the physical and chemical characteristics of expected condensates or residues that are generated and a plan for their disposal. The disposal plan shall be submitted with a permit application or as a request for a specific approval. In addition, if the gas